

# Conversion Instructions for the Four-Player Gauntlet II™

## Introduction

This manual provides the instructions for converting your existing four-player Gauntlet game to a Gauntlet II game. These instructions include: (1) installing the control panel decal, the speaker grille decal, and the front panel decal; (2) replacing and adding some integrated circuits (ICs) on the game printed-circuit board (PCB); (3) installing the display sign; and (4) installing the contest promotion items (for U.S. games only).

Some modifications (installing decals, installing EPROMs) to convert your four-player Gauntlet game are necessary only for Gauntlet games that are *already located in the field*. New Gauntlet II games shipped from the factory do not have to be modified because that has been done at the factory. If your Gauntlet II game is new, your game does not need to be retrofitted. Use this manual for reordering information only if you need to replace worn-out or defective chips or decals.

These instructions are for operators with a few Gauntlet games; those people should convert the games on site. For operators with many Gauntlet games, we recommend that you buy the following spare parts from your distributor and retrofit them in your shop first.

- Control panel, Atari part number A043386-01
- Speaker grille, Atari part number 043348-01
- Game PCB, Atari part number A043201-21

After retrofitting these three parts in your shop, you will need to make only one trip to the location for approximately 15 minutes to install them. This method guarantees that there will be little interference with traffic at the location.

For some of the conversion procedures, you will need to refer to the *Gauntlet Operators Manual*, TM-284. If you do not have this manual, contact your distributor or the nearest Atari Games Corporation Customer Service Office to obtain a copy.

### NOTE

Do not discard this conversion manual after modifying your game. Keep the manual as a supplement to your *Gauntlet Operators Manual*.

## Game Play

Gauntlet II incorporates all of the exceptional player features of the original Gauntlet. In addition to over 100 new maze layouts, many randomizing features have been included in each maze to provide even further variety for players. Random elements include: horizontal and vertical reflected mazes, randomly arranged walls, random food and potion placement, several different potential starting places in the same maze, and randomly arranged traps. New floor and wall pictures and colors further differentiate Gauntlet II from the original Gauntlet.

Players will especially like the additional game play objective of Gauntlet II's Secret Rooms. By completing a special secret trick, players are allowed to enter the Secret Room while the other players in the game are temporarily suspended from play. If they complete the required task, players are rewarded with a large bonus score as well as permanent potions and food. (For example, one task might be collecting all treasure and exiting within 20 seconds).

There are also several new features and hidden strategies to be found in each maze. The player must make more tactical decisions because Gauntlet II provides more unique game play situations and objectives. These new features include: movable walls, secret destructible walls, invisible walls, and closed treasure chests that contain either something good or something bad. Other new features consist of: exits that close and reopen, false exits, walls that move in a cyclical pattern, stun tiles, multiple traps, invisible trap walls, local traps, force fields, extra speed on monsters, various patterns for monster behavior, poisoned food, and poisoned potions.

All of the original Gauntlet opponents remain with the addition of many new creatures. Among the newest adversaries are the Super Thief, Super Sorcerer, the Acid Puddle, the IT creature, the Mugger, and the Dragon. The fire-breathing Dragon, in particular, adds a whole new dimension to game play. The Dragon can be found guarding the exit to the maze and requires several direct hits to be overcome. By slaying the Dragon, the player will be rewarded with a permanent potion and a bag of treasure. In addition, at the start of the next maze there will be a hint on how to find the Secret Room.

Along with all of the original potions, players will find

several new potions to collect. Invulnerability, repulsiveness, reflective shots, super shots, and transportability are among the new special temporary abilities. Experience will tell the player which potions provide the greatest advantage; some potions might not be beneficial depending on the game play situation.

A new feature that players especially like is being able to select their favorite hero. In Gauntlet II, a player can now choose his favorite original Gauntlet character such as Thor the Warrior, Thyra the Valkyrie, Merlin the Wizard, or Questor the Elf—even if that hero is already in play. The four characters are color-coded so there can be as many as four Warriors, for example, in play at the same time. If four Warriors were in play, one would be red, another blue, another yellow, and the remaining one would be green.

## Gauntlet II Player Quest Contest

(U.S. and Canada Only)

Atari Games is sponsoring a player contest that is built into every Gauntlet II game shipped within the U.S. and Canada. Called the Gauntlet II Player Quest, the contest requires minimal effort on the part of operators and locations. Atari will be awarding significant prizes in an effort to build further player interest in Gauntlet II and to give locations a competitive advantage for promoting the contest.

A promotion packet is included in all Gauntlet II kits and games shipped within the U.S. and Canada. Refer to the entry forms included in the promotion packet for the specific terms of the contest.

### NOTE

If any U.S. or Canadian operator does not wish to participate in the contest, the Gauntlet II game option setting, *Enable Secret Code*, must be changed. Refer to *Enable Secret Code Game Option* in this manual for more information. (Gauntlet II games and kits shipped outside of the U.S. and Canada do *not* have the contest option enabled.)

## Kit Parts Inventory

The assembly and part numbers listed in Table 1 are included in the Gauntlet II Conversion Kit. Refer to Chapter 5, Illustrated Parts Lists, in the *Gauntlet Operators Manual* for a description of the component parts comprising the control panel assembly and the game PCB assembly.

**Table 1 Kit Parts Inventory  
A043755-01**

Part No.	Quantity	Description
A043761-01	1	IC Kit
038158-01	1	Product Identification Label
041508-01	16	Joystick Leaf Switch
043757-01	1	Control Panel Decal
043758-01	1	Speaker Grille Decal
043759-01	1	Display Sign
043760-01	1	Front Panel Decal
160013-002	4	Cross-Bar Leaf Switch with Button Holder
CO-284-07	1	Conversion Instructions for Four-Player Gauntlet II
043756-01	1	Contest Marquee (U.S. and Canada only)
043798-01	1	Contest Poster (U.S. and Canada only)
CO-284-08	25	Contest Entry Form (U.S. and Canada only)
CO-284-09	10	Player Tips Sheet
CO-284-10	1	Contest Cover Letter (U.S. and Canada only)

## Tools Required

The only tools required to perform a complete Gauntlet II conversion are: chip extractor tool, Phillips screwdriver, 3/8-inch wrench, 15/16-inch wrench, 5/64-inch hex wrench, 1/8-inch hex driver, #10 Torx driver or other appropriate tool, heat gun, X-ACTO® knife, isopropyl alcohol, and black marker.

## Conversion Instructions



### WARNING



To avoid electrical shock, unplug the game before performing the conversion procedures.

### NOTE

The following conversion should be performed by qualified service personnel.

The following procedures are arranged in the sequence recommended for performing the game conversion. The parts of your cabinet that are affected by the conversion

are removed or cleaned first, and then the new Gauntlet II kit parts are installed.

## Replace the Joystick Leaf Switches and the Fire Button Leaf Switches

Due to the heavy use of these leaf switches, we strongly recommend that you replace all the joystick switches and all the Fire button switches. Good earnings depend on properly working switches. The Gauntlet conversion kit contains replacement joystick leaf switches, Atari part number 041508-01, and replacement Fire button leaf switches, Atari part number 160013-002. Perform the following procedure to replace the switches.

1. Remove the control panel from the cabinet. Refer to page 4-2 in the *Gauntlet Operators Manual*, Removing the Control Panel.
2. Remove the pushbutton leaf switches from the control panel. Refer to page 4-4 in the *Gauntlet Operators Manual*, Removing the Pushbutton Leaf Switches.
3. Remove all the Fire button and Start button leaf switches.
4. Remove all the joysticks from the control panel. Refer to page 4-4 in the *Gauntlet Operators Manual*, Removing the Joystick.
5. Replace all 16 joystick leaf switches with those provided in the Gauntlet II conversion kit. Refer to page 4-5 in the *Gauntlet Operators Manual*, Removing the Joystick Leaf Switches.
1. Perform steps 1-5 of the preceding section, *Replace the Joystick Leaf Switches and the Fire Button Leaf Switches*.
2. Do not remove the existing control panel decal. Clean it with a lint-free cloth dampened with isopropyl alcohol (or other appropriate cleaner).
3. Do not remove the T-molding from the edges of the control panel.
4. Using a black marker, mark the control panel along the edge of the T-molding where the Gauntlet II decal does not cover the existing decal.
5. Using an X-ACTO knife, carefully cut and remove a strip of protective backing from the switch holes near the center of the Gauntlet II decal.
6. Remove the protective backing from one end of the Gauntlet II control panel decal. Carefully position the decal so that the holes in the decal are aligned with the holes in the control panel. Then press the center of the decal onto the control panel.
7. Then using the palm of your hand, rub the decal from the center toward the edge of the control panel. Repeat for the opposite edge of the decal.
8. Reinstall the joysticks and the pushbutton leaf switches. Be sure to test the joysticks and the pushbutton leaf switches. Refer to *Test/Repair the Joysticks and the Pushbuttons* in this manual.

## Install the Control Panel Decal

### NOTE

Installing the new Gauntlet II control panel decal is very important in order to ensure the success of your Gauntlet II game. Not only will the new control panel decal make your existing Gauntlet game look like a new game, but the decal has special player instructions unique to Gauntlet II.

After removing the joystick and the pushbutton controls and replacing the joystick leaf switches, the Gauntlet II control panel decal should be installed. Perform the following procedure to install the new control panel decal.

### CAUTION

When applying each Gauntlet II decal, do so very carefully. Once stuck to any surface, the decal is very hard to remove.

## Install the Speaker Grille Decal

The existing speaker grille decal does not have to be removed before applying the Gauntlet II decal. However, if the existing speaker grille decal is warped or cut, the decal should be removed. Perform the following procedure to install the speaker grille decal.

1. Using a 1/8-inch hex driver, remove the three screws on top and the two screws on the front of the speaker grille panel. Then remove the panel.
2. Clean the existing speaker grille decal with a lint-free cloth moistened with isopropyl alcohol (or other appropriate cleaner).
3. Remove the protective backing from the bottom edge of the Gauntlet II speaker grille decal. Carefully position the decal so that the decal is aligned with the bottom edge and the two screw holes of the existing decal. Press the center of the decal onto the panel. Then using the palm of your hand, rub the decal from the center toward the edge of the speaker panel.
4. Repeat for the side edges of the decal and then for the top of the decal.
5. Reinstall the speaker grille panel on the cabinet, then install the three screws on top and the two screws on the front of the panel.

Perform the following procedure to install the existing speaker grille decal if it is warped or cut.

### NOTE

We recommend that a second person assist in removing the decal. One person should hold the speaker grille panel while the second person removes the decal.

1. Using a heat gun or hair dryer, directly heat the existing speaker grille decal, not the metal. Do not melt the decal. (The decal can be removed without heating, but with more difficulty.)
2. While applying heat, grasp the corners of the decal and peel it from the panel.
3. Perform steps 3 through 5 of the preceding speaker grille decal instructions.

## Install the Front Panel Decal

The existing front panel decal does not have to be removed before applying the Gauntlet II decal. Perform the following procedure to install the new front panel decal.

1. Clean the existing front panel decal with a lint-free cloth moistened with isopropyl alcohol (or other appropriate cleaner).
2. Remove the protective backing from one end of the decal. Carefully position the Gauntlet II front panel decal so that the decal is aligned with the top center edge of the existing decal. Then press the center of the decal onto the panel.
3. Using the palm of your hand, rub the decal from the center toward one edge of the front panel. Repeat for the opposite edge of the decal.

## IC Kit

A new set of 19 integrated circuits (ICs) has been designed for your Gauntlet II Game PCB. Table 2 lists the ICs and their Game PCB locations for the U.S., German, and Japanese kits.

## Location of Replacement ICs

The Game PCB Assembly showing the location of each IC to be replaced or added is included in this manual. (See Figure 1.) Each IC is marked with the letter A or R.

A represents an EPROM to be added  
R represents an EPROM to be replaced

**Table 2 Integrated Circuits in Four-Player Gauntlet II Conversion Kit**

### Basic Set of ICs:

Designator	Description	Part No.
1A	300 ns EPROM Integrated Circuit	136043-1111
1C	300 ns EPROM Integrated Circuit	136043-1123
1L	300 ns EPROM Integrated Circuit	136043-1113
1P	300 ns EPROM Integrated Circuit	136043-1124
2A	300 ns EPROM Integrated Circuit	136043-1115
2C	300 ns EPROM Integrated Circuit	136043-1125
2L	300 ns EPROM Integrated Circuit	136043-1117
2P	300 ns EPROM Integrated Circuit	136043-1126
4R	Type-82S129 PROM Integrated Circuit	136043-1103
6P	300 ns EPROM Integrated Circuit	136043-1104
10A	200 ns EPROM Integrated Circuit	136043-1105
10B	200 ns EPROM Integrated Circuit	136043-1106
10C	SLAPSTIC Custom Integrated Circuit	137412-106
16R	300 ns EPROM Integrated Circuit	136043-1120
16S	300 ns EPROM Integrated Circuit	136043-1119

### ICs for U.S. Gauntlet II Game Only:

Designator	Description	Part No.
6A	200 ns EPROM Integrated Circuit	136043-1121
6B	200 ns EPROM Integrated Circuit	136043-1122
7A	200 ns EPROM Integrated Circuit	136043-1109
7B	200 ns EPROM Integrated Circuit	136043-1110

### ICs for German Gauntlet II Game Only:

Designator	Description	Part No.
6A	200 ns EPROM Integrated Circuit	136043-1221
6B	200 ns EPROM Integrated Circuit	136043-1222
7A	200 ns EPROM Integrated Circuit	136043-1209
7B	200 ns EPROM Integrated Circuit	136043-1210

### ICs for Japanese Gauntlet II Game Only:

Designator	Description	Part No.
6A	200 ns EPROM Integrated Circuit	136043-1421
6B	200 ns EPROM Integrated Circuit	136043-1422
7A	200 ns EPROM Integrated Circuit	136043-1409
7B	200 ns EPROM Integrated Circuit	136043-1410

## Install the ICs

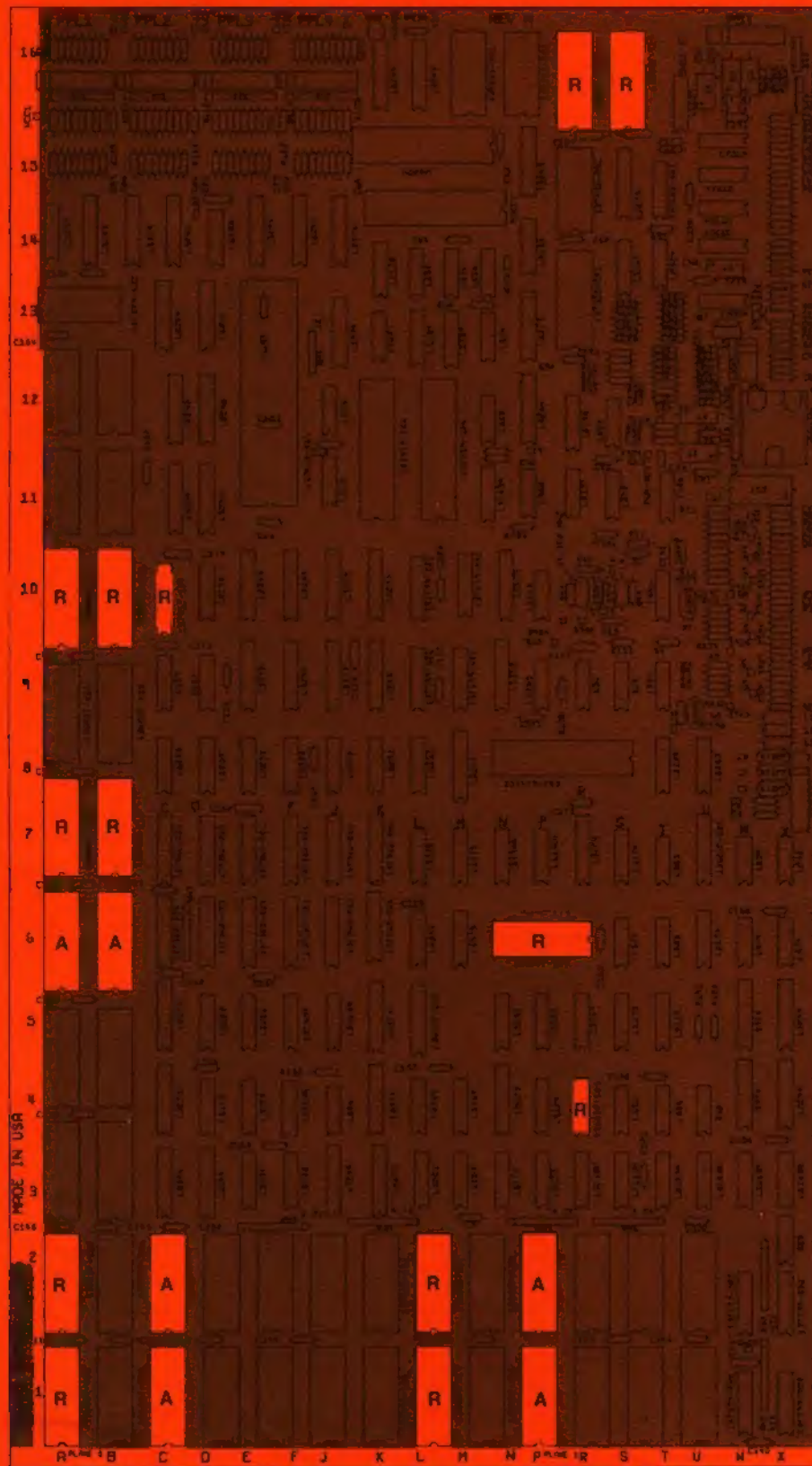
Perform the following procedure to install the new integrated circuits (ICs).



### WARNING



To avoid electrical shock, unplug the game before performing the conversion procedures if you have not already done so.



# NOTICE TO ALL PERSONS RECEIVING THIS DRAWING

CONFIDENTIAL. Reproduction forbidden without the specific written permission of Atari Games Corporation, Milpitas, CA. This drawing is only conditionally issued, and neither issued nor possession thereof confers any right in, or license to use, the subject matter of the drawing or any design or technical information shown therein, nor any right to reproduce this drawing or any part thereof. Licensed for manufacture by vendors of Atari Games Corporation, and for manufacture under the corporation's written license. No right is granted in reproducing this drawing or the subject matter thereof, unless by written agreement with its author (hereinafter, the corporation).

A = Add  
R = Replace

Figure 1 Installing Gauntlet II ICs into Game PCB Assembly

1. Remove the Gauntlet Game PCB from the cabinet. Refer to page 4-5 in the *Gauntlet Operators Manual*, Removing the Game PCB.
2. Refer to the Gauntlet Game PCB Assembly, and determine the location of the ICs to be replaced and added. (See Figure 1.)
3. Locate each IC to be replaced, and remove it with a chip extractor tool.
4. For each installment IC, align all of the pins on one side of the chip, and bend that row inward so that it is parallel to the other row. Carefully insert the chip into the proper socket on the game PCB, making sure the orientation notch faces the correct direction.
5. Then locate each new IC to be added, and insert it in its correct socket.
6. Reinstall the Game PCB in the cabinet, connect all the harness connectors, and reinstall the control panel.

## Install the Product Identification Label

Perform the following procedure to install the Gauntlet II product identification label.

1. Remove the protective backing from the Gauntlet II product identification label.
2. Place the Gauntlet II product identification label over the existing product identification label on the back of the cabinet.

## Install the Display Sign

Perform the following procedure to install the Gauntlet II display sign.

1. Fold the bottom of the adhesive-backed cardboard display sign. Then fold the edge and bottom of the adhesive-backed display sign stand. Attach the stand to the center of the sign to become an easel.
2. Place the sign on the top of your game. Be sure the adhesive-backed sign bottom adheres to the surface of the cabinet.

## Install the Contest Promotion Items

(U.S. and Canada Only)

Perform the following procedure to install the Gauntlet II Player Quest Contest promotion items.

1. Install the contest marquee according to the directions, then place the marquee behind and to the right of the display sign on top of your game.
2. Place the contest poster in the front window of your location.

3. Place the contest entry forms in an accessible area in your location. (Players can also write to Atari Games Corporation for additional entry forms.)

## Inspect the Game

Before applying power, perform the following inspection procedure.

1. Carefully check that the Gauntlet II conversion kit parts have been properly installed.
2. Plug in the game power.
3. Perform the self-test procedure as given in Chapter 3 of the *Gauntlet Operators Manual*. Be sure to reset the *Restore Factory Default Settings* option and to perform the Switch Test. Refer to the procedure in *Reset the Game Options* in this manual.
4. Be sure to reset the statistics and the histograms. Refer to the procedure in *Reset the Statistics and Histograms* in this manual.
5. Securely fasten the spring draw latches under the control panel. Close and lock the front doors.

## Reset the Game Options

After completing the Gauntlet II conversion, some game options should be reset. The game options are set in the Self-Test Mode. See Table 3 for the recommended settings. The recommended setting for the Health Per Coin option is 750 for Gauntlet II. Perform the following procedure for resetting the options.

1. Press the Warrior Magic button until the Game Options screen is displayed. Note that the default (recommended) settings are highlighted in green.
2. Move the joystick up or down to select the *Restore Factory Default Settings* option. Move the joystick right or left to select the *Yes* setting. Press the Warrior Magic button. Refer to Chapter 3 in the *Gauntlet Operators Manual* for further information on setting the game options.

### NOTE

Exiting the Game Option screen by turning off the self-test switch will *not* set the game for the selected options. Press the Warrior Magic button before turning off the self-test switch.

### NOTE

After changing the health per coin value, pressing the Warrior Magic button, and then turning off the self-test switch, a screen message (*PRESS BOTH WARRIOR BUTTONS TO ABORT CLEARING STATS*) is displayed in the Attract Mode. Ignore this message.

## Atari Games Corporation Customer Service

If reading through this manual does not lead to solving a maintenance or repair problem, call TELEHELP® at one of these Atari Games Customer Service offices:

### United States

#### Parts and Service

Atari Games Corporation  
California Customer Service Office  
737 Sycamore Drive  
P.O. Box 361110  
Milpitas, CA 95035  
**Telex 5101007850**  
(Monday–Friday, 7:30–4:00 pm Pacific Time)



**(408) 434-3950**

### Europe

#### Parts and Service

Atari Games Corporation  
European Customer Service Office  
Tipperary Town, Ireland  
**Telex 28165**  
(Monday–Friday, 9:00–6:00 pm GMT)



**062-52155**

© 1986 by Atari Games Corporation

All rights reserved.

No part of this publication may be reproduced by any mechanical, photographic, or electronic process, or in the form of a phonographic recording, nor may it be stored in a retrieval system, transmitted, or otherwise copied for public or private use, without permission from the publisher.

The game play, all graphic designs, this technical manual, its accompanying schematic diagrams, and the display manual are protected by the U.S. Copyright Act of 1976.

This Act provides for increased penalties for violating federal copyright laws. Courts *can* impound infringing articles while legal action is pending. If infringers are convicted, courts can order destruction of the infringing articles.

In addition, the Act provides for payment of statutory damages of up to \$250,000 in certain cases. Infringers may also have to pay costs and attorneys' fees and face an imprisonment of up to five years.

Atari Games Corporation will aggressively enforce its copyrights against any infringers. We will use all legal means to immediately halt any manufacture, distribution, or operation of a copy of video games made by us. Anyone who purchases such copies risks forfeiting such a game.

Published by: Atari Games Corporation  
P.O. Box 361110  
Milpitas, California 95035

Printed in the U.S.A. 7Q

**Table 3 Game Option Settings**

Option Name	Available Settings
Reset High Score Table	No Yes ◀
Sounds in Attract Mode	No Yes ◀
Restore Factory Default Settings	No ◀ Yes
Game Difficulty	0—Easiest 1 2—Easy 3 4—Moderate ◀ 5 6—Hard 7—Hardest
Health Per Coin	100, 125, 150, 175, 200, 225, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750 ◀, 800, 850, 900, 950, 1000 ✓, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, and 2000
Coins to Start	1 ◀, 2, 3, 4
Enable Secret Code	No ✓ * Yes ◀
Disable Speech	No ◀ Yes
Reduce Text	No ◀ Yes ✓

◀ *Manufacturer's recommended settings*✓ *Manufacturer's recommended settings for Japanese Gauntlet II game only*\* *Manufacturer's recommended settings for German Gauntlet II game only*

## Enable Secret Code Game Option

A new game option called the Enable Secret Code is designed into the Gauntlet II game software. This option allows players to acquire a personalized secret code after finding their way to the secret maze and performing the required task. After successfully completing the task, players are asked to enter their full name (last name first) using up to 29 characters.

The Enable Secret Code option is set by first displaying the Game Options screen in the Self-Test Mode. After selecting the *Restore Factory Default Settings* game option, then selecting the *Yes* setting and pressing the Warrior Magic button, the software automatically sets the Enable Secret Code option.

If any U.S. or Canadian operator does *not* want to participate in the Gauntlet II Player Quest Contest, the Enable

Secret Code option setting must be changed to *no*. Perform the following procedure to change this setting.

1. Enter the Self-Test Mode by turning on the self-test switch.
2. Press the Warrior Magic button until the Game Options screen is displayed. Note that the default (recommended) settings are highlighted in green.
3. Move the joystick up or down to select the *Enable Secret Code* option. Move the joystick right or left to select the *No* setting. Press the Warrior Magic button to save this setting and to obtain the next screen.
4. Turn off the self-test switch.

## Test/Repair the Joysticks and the Pushbuttons

After installing the Gauntlet II conversion kit parts, the joystick and the pushbutton controls should be tested. Perform the following procedure to test the controls.

1. Enter the Self-Test Mode by turning on the self-test switch.
2. Display the Switch Test. Refer to page 3-3, Switch Test, in the *Gauntlet II Operators Manual* for further information on both tests.
3. Test the joysticks by moving each joystick into all eight positions. Moving the joystick up/down or left/right should activate one switch. The diagonal positions should activate *two* switches. If two switches are not activated, then adjust or replace the switch. Also, once the joystick is moved into each position, wiggle the joystick. If the zero on the screen changes in any way, replace the switch. Refer to Removing the Joystick Leaf Switches in the *Gauntlet Operators Manual*.
4. Test all the pushbuttons. Then wiggle the pushbutton. If the zero on the screen changes in any way, replace the switch. Refer to Removing the Pushbutton Leaf Switches in the *Gauntlet Operators Manual*.

### NOTE

The Gauntlet II conversion kit does not contain pushbutton leaf switch, Atari part number 160013-001. However, if replacement leaf switches are needed, they can be obtained from your distributor or nearest Atari Field Service Office.

## Reset the Statistics and the Histograms

The statistics and the histogram information should be reset after completing the conversion to ensure accurate

game data. Perform the following procedure to reset this information.

1. To reset the statistics information, display the Statistics screen in the Self-Test Mode, then press the Warrior Fire button.
2. To reset the histograms, display the Histogram for Player 3 in the Self-Test Mode, then press the Warrior Fire button.
3. Turn off the self-test switch, then close and lock the front doors.

Refer to page 3-5, Statistics, and Histograms in the *Gauntlet Operators Manual* for further information.

## Attract Mode

The Attract Mode begins when the game is powered up or after exiting the Play or Self-Test Modes. The Attract Mode ends when coins or tokens are inserted. The Attract Mode continuously cycles through the following displays unless a player presses a button or moves a joystick:

- Gauntlet title screen
- Game play demonstration
- Legend depicting all the objects the players can collect, such as treasure, food, and magic potions
- Monster screen: One screen displays all the monsters and how they differ
- Audiovisual credits
- High score table: One screen displays the high score per coin for each of the four characters